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09/813,419	03/20/2001	David L. Sames	NA00-10201	2414

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EXAMINER

HUA, LY

ART UNIT PAPER NUMBER

2135

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/813,419	<b>Applicant(s)</b> SAMES ET AL.	
	<b>Examiner</b> Ly V. Hua	<b>Art Unit</b> 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/16/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The next row of this table shows applicant's presentation of independent claims 1, 17 and 9 as read by the examiner.

<p>3. 1. A method</p> <p>a. for managing</p> <p>i user attributes</p> <p>(1) in a distributed computing system,</p> <p>ii wherein user attributes determine</p> <p>(1) access rights to a computer application:</p> <p>b. the method comprising:</p> <p>i modifying</p> <p>(1) an attribute database,</p> <p>(2) wherein the attribute database includes</p> <p>(a) a plurality of possible user attributes and</p> <p>(b) a plurality of users;</p> <p>ii obtaining</p> <p>(1) an identity certificate</p> <p>(a) from a certificate authority;</p> <p>iii associating</p> <p>(1) the identity certificate</p> <p>(2) with a user</p> <p>(a) from the plurality of users</p> <p>(i) within the attribute database;</p> <p>iv assigning</p> <p>(1) an attribute</p> <p>(a) from the plurality of possible user attributes</p> <p>(2) to the user,</p> <p>(a) whereby the user</p> <p>(i) is granted</p> <p>1) access rights</p> <p>2) based on</p> <p>a) the attribute and</p> <p>b) the identity certificate;</p> <p>v storing</p> <p>(1) the attribute</p> <p>(a) assigned to the user</p> <p>(2) in the attribute database; and</p> <p>vi distributing</p> <p>(1) modifications</p> <p>(a) to the attribute database</p> <p>(2) to a plurality of hosts</p> <p>(a) coupled together</p> <p>(i) by a network.</p>	<p>4. 17. An apparatus that facilitates</p> <p>a. managing</p> <p>i user attributes</p> <p>(1) in a distributed computing system,</p> <p>ii wherein user attributes determine</p> <p>(1) access rights to a computer application:</p> <p>b. the apparatus comprising: &lt;combination of elements that performs the steps of claim 1&gt;</p> <p>i a modifying mechanism configured to modify</p> <p>(1) an attribute database,</p> <p>(2) wherein the attribute database includes</p> <p>(a) a plurality of possible user attributes and</p> <p>(b) a plurality of users;</p> <p>ii an identity certificate obtaining mechanism configured to obtain</p> <p>(1) an identity certificate</p> <p>(a) from a certificate authority;</p> <p>iii an associating mechanism configured to associated</p> <p>(1) the identity certificate</p> <p>(2) with a user</p> <p>(a) from the plurality of users</p> <p>(i) within the attribute database;</p> <p>iv an assigning mechanism configured to assign</p> <p>(1) an attribute</p> <p>(a) from the plurality</p> <p>(i) of possible user attributes</p> <p>(2) to the user,</p> <p>(3) whereby the user</p> <p>(a) is granted</p> <p>(i) access rights</p> <p>(ii) based on</p> <p>1) the attribute and</p> <p>2) the identity certificate;</p> <p>v a storing mechanism configured to store</p> <p>(1) the attribute</p> <p>(a) assigned to the user</p> <p>(2) in the attribute database; and</p> <p>vi a distributing mechanism that is configured to distribute</p> <p>(1) modifications</p> <p>(a) to the attribute database</p> <p>(2) to a plurality of hosts</p> <p>(a) coupled together</p> <p>(i) by a network.</p>	<p>5. 9. A computer-readable storage medium</p> <p>a. storing</p> <p>i instructions that</p> <p>(1) when executed by a computer</p> <p>(2) cause</p> <p>(a) the computer to perform a method &lt;of claims 1&gt;</p> <p>(i) for managing</p> <p>1) user attributes</p> <p>a) in a distributed computing system,</p> <p>b) wherein user attributes determine</p> <p>i) access rights to a computer application:</p> <p>b. the method comprising:</p> <p>i &lt;the steps of claims 1&gt;</p> <p>(1) modifying an attribute database, wherein the attribute database includes a plurality of possible user attributes and a plurality of users;</p> <p>(2) obtaining an identity certificate from a certificate authority;</p> <p>(3) associating the identity certificate with a user from the plurality of users within the attribute database;</p> <p>(4) assigning an attribute from the plurality of possible user attributes to the user, whereby the user is granted access rights based on the attribute and the identity certificate;</p> <p>(5) storing the attribute assigned to the user in the attribute database; and</p> <p>(6) distributing modifications to the attribute database to a plurality of hosts coupled together by a network.</p>
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6. With regard to claim 1:
  - a. The phrase "the ... database ... includes ... users" appears to be confusing since it is not clear how it can be possible that "users" (being people) can be stored in a database.
  - b. The limitation in the "whereby" clause (which recited with in the recitation of the assigning step) is confusing.
    - i. Notice:
      - (1) that it is not clear as to how it is possible that the assigning of the attribute to the user would result in the granting's being based on the identity certificated; and
      - (2) that the identity certificate is not involved in the assigning step.
    - c. The steps are not disjointed and thus are confused.
      - i. Notice that:
        - (1) It is not clear as to what are those which are being considered by the term "modifications" (recited in the "distributing" clause).
        - (a) The step of "distributing" appears to be not related to any other steps in the claim.
        - (b) The term "modifications" being used as a direct object for the distributing to act on appears to be confusing.
        - (c) It is not clear where the "modifications" come from so that they can be distributed.
      - (2) The of storing of the attribute appears to be not being used by (or having effect on) the final (distributing) step of the method.
        - (a) Notice also that:
          - (i) It is not clear as to why the attribute (which has been assigned to the user) is stored into the database.
          - (ii) the preposition "in" recited in the storing step is not grammatically proper, (perhaps it should be changed to -into--).
      - (3) The step of assigning of the attribute to the use appears to be not used by (or having effect on) the final (distributing) step of the method.
      - (4) The combination of the step of obtaining and the step of associating appears to be not used by (or having effect on) the final (distributing) step of the method.
      - (5) Since the first (modifying) step appears to be solely coherent with the last (distributing) step, the purpose for which the steps in between are recited is not clear in term of interactions among method steps.
7. With regard to claims 2-8:
  - a. These claims depend on claim 1 and thus inherit the problem of indefiniteness therefrom.
8. With regard to claim 9:
  - a. This claim has the same recitation as that of claim 1, and thus the reasons listed above for rejecting claim 1 is also used for rejecting claim 9.
9. With regard to claims 10-16:
  - a. These claims depend on claim 9 and thus inherit the problem of indefiniteness therefrom.
10. With regard to claim 17:
  - a. This claim has the same recitation as that of claim 1, and thus the reasons listed above for rejecting claim 1 is also used for rejecting claim 17.
11. With regard to claims 18-24:
  - a. These claims depend on claim 17 and thus inherit the problem of indefiniteness therefrom.
12. With regard to claims 1-24:
  - a. **Applicant's objective**
    - i. of what is needed
      - (1) is
        - (a) a method and an apparatus
          - (i) for managing
            - 1) user attributes
              - a) in a distributed system,
              - 2) without
                - a) using
                  - i) certificates
                  - ii) for attribute-based access control
      - ii as mentioned in the specification
      - iii is not specifically clarified in each of the groups of claims 1-8, claims 9-16 and claims 17-24.

The first column of this table shows dependent claims 2-7. The second column shows the reasons for rejection each of the claims in the first column.	
<p>13. 2. The method of claim 1, further comprising:</p> <p>a. assigning</p> <ol style="list-style-type: none"> <li>i a second attribute (1) from the plurality of possible user attributes to the user; and</li> <li>ii storing</li> </ol> <p>b. the second attribute</p> <ol style="list-style-type: none"> <li>i (1) assigned to the user</li> <li>ii in the attribute database.</li> </ol>	<p>14. With regard to claim 7:</p> <p>a. The reason for which the second attribute (instead of the other attribute) is assigned and stored to the user is not clear.</p> <p>b. The involvement of only the "second" attribute in the process of the method appear to be confusing (1) as to what is to be done with the rest of the other attributes and as to why would user(s) have only the second attribute at the end - this appears to defeat the intention of managing for attributes for security purpose because only second attribute is being assigned to users, which assigning would result cause all users to have the same attribute/right/privilege (determined by the second attribute) and no specific constrain/restriction to the different users.</p>
<p>15. 3. The method of claim 1, further comprising</p> <p>a. using</p> <ol style="list-style-type: none"> <li>i secure communications (1) for distributing (a) modifications to the attribute database (b) to the plurality of hosts.</li> </ol>	<p>16. With regard to claim 3:</p> <p>It is not clear as to at what point in the sequence of steps of the "using" step occurs.</p>
<p>17. 4. The method of claim 1, further comprising</p> <p>a. signing</p> <ol style="list-style-type: none"> <li>i the attribute database</li> <li>ii with a cryptographic signature</li> <li>iii to allow (1) detection (a) of unauthorized changes to the attribute database.</li> </ol>	<p>18. With regard to claim 4:</p> <p>a. This claim depends on claim 1, and still does not clarify the interaction of the distributing step of claim 1 with each of the other steps.</p>
<p>19. 5. The method of claim 1, wherein</p> <p>a. a host of the plurality of hosts can distribute (1) modifications to the attribute database (2) to a subordinate host in a tree architecture.</p>	<p>20. With regard to claim 5:</p> <p>a. This claim depends on claim 1, and still does not clarify the interaction of the distributing step of claim 1 with each of the other steps.</p>
<p>21. 6. The method of claim 1, further comprising</p> <p>a. allowing</p> <ol style="list-style-type: none"> <li>i the user</li> <li>ii to assume (1) any attribute (a) stored in the attribute database (b) that is assigned to the user.</li> </ol>	<p>22. With regard to claim 6:</p> <p>a. The step of "allowing" in this claim appears not to have any cooperation with any of the other steps recited in its parent claim 1. Therefore the interaction of this step among the other step is not clear.</p>
<p>23. 7. The method of claim 1, further comprising:</p> <p>a. deleting</p> <ol style="list-style-type: none"> <li>i the attribute assigned to the user</li> <li>ii from the attribute database; and</li> </ol> <p>b. redistributing</p> <ol style="list-style-type: none"> <li>i the attribute database</li> <li>ii to the plurality of hosts.</li> </ol>	<p>24. With regard to claim 7:</p> <p>a. The steps recited in this claim is confusing because they appear to defeat the step set forth in the last two step of its parent Claim 1.</p>

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25. The claims 10-16 (which depend on claim 9) and claims 18-24 (which depend on claim 17) have formats that are similar to those of claim 2-7 and have the same problem of indefiniteness. The Applicant is reminded to amend these claims 10-16 and claims 18-24 when amending claim 2-7.

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly V. Hua whose telephone number is (703) 305-9684. The examiner can normally be reached on Monday to Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Kim, can be reached on 703-305-4303. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

28. The applicant is hereby notified that:

- a. TC 2100 will be moved to Carlyle in October 2004.
- b. The new phone number for TC 2100 receptionist is (571) 272-2100.
- c. The examiner's new contact phone number will be (571) 272-3853.



Ly V. Hua  
Primary Examiner  
Art Unit 2135

Lvh

September 30, 2004